

Food & Drug



Interactions

Medicines can treat and cure many health problems. However, they must be taken properly to ensure that they are safe and effective. Many medicines have powerful ingredients that interact with the human body in different ways, and diet and lifestyle can sometimes have a significant impact on a drug's ability to work in the body. Certain foods, beverages, alcohol, caffeine, and even cigarettes can interact with medicines. This may make them less effective or may cause dangerous side effects or other problems.

When you take medicine, be sure to follow your doctor's instructions carefully to obtain the maximum benefit with the least risk. Changes in a medicine's effect due to an interaction with food, alcohol or caffeine can be significant; however, there are many individual factors that influence the potential for such variations, like dose, age, weight, sex, and overall health.

This brochure has information about possible interactions between many common prescription and nonprescription (over-the-counter) medications with food, alcohol and caffeine. But this brochure should not replace the advice from your physician, pharmacist, or other health care professional. If you have any questions or concerns about possible drug interactions, consult your health care professional.

Make sure your doctor and pharmacist know about every drug you are taking, including nonprescription drugs and any dietary supplements such as vitamins, minerals and herbals. If you have problems or experience side effects related to medication, call your health care provider right away. It is also important to remember that many drugs interact with other drugs and may cause serious medical conditions.

In this brochure, the generic (nonproprietary) name for each drug is stated first. Brand names are in full capital letters and represent only some examples of those medications.

ALLERGIES

Antihistamines are used to relieve or prevent the symptoms of colds, hay fever, and allergies. They limit or block histamine, which is released by the body when we are exposed to substances that cause allergic reactions. Antihistamines are available with and without a prescription (over-the-counter). These products vary in their ability to cause drowsiness and sleepiness.

ANTI-HISTAMINES

Some examples are:

Over the Counter:

brompheniramine / DIMETANE,
BROMPHEN

chlorpheniramine / CHLOR-TRIMETON

diphenhydramine / BENADRYL

clemastine/TAVIST

Prescription:

fexofenadine / ALLEGRA

loratadine / CLARITIN

cetirizine / ZYRTEC

astemizole/HISMANAL

Interaction

Food: It is best to take prescription antihistamines on an empty stomach to increase their effectiveness.

Alcohol: Some antihistamines may increase drowsiness and slow mental and motor performance. Use caution when operating machinery or driving.

ARTHRITIS AND PAIN

ANALGESIC/ANTIPYRETIC

They treat mild to moderate pain and fever.

An example is:

acetaminophen/TYLENOL, TEMPRA

Interactions

Food: For rapid relief, take on an empty stomach because food may slow the body's absorption of acetaminophen.

Alcohol: Avoid or limit the use of alcohol because chronic alcohol use can increase your risk of liver damage or stomach bleeding. If you consume three or more alcoholic drinks per day talk to your doctor or pharmacist before taking these medications.

NON-STEROIDAL ANTI-INFLAMMATORY DRUGS (NSAIDs)

NSAIDs reduce pain, fever, and inflammation. Some examples are:

- aspirin/BAYER, ECOTRIN
- ibuprofen/MOTRIN, ADVIL
- naproxen/ANAPROX, ALEVE, NAPROSYN
- ketoprofen/ORUDIS
- nabumetone/RELAFFEN

Interaction

Food: Because these medications can irritate the stomach, it is best to take them with food or milk.

Alcohol: Avoid or limit the use of alcohol because chronic alcohol use can increase your risk of liver damage or stomach bleeding. If you consume three or more alcoholic drinks per day talk to your doctor or pharmacist before taking these medications. Buffered aspirin or enteric coated aspirin may be preferable to regular aspirin to decrease stomach bleeding.

CORTICOSTEROIDS

They are used to provide relief to inflamed areas of the body. Corticosteroids reduce swelling and itching, and help relieve allergic, rheumatoid, and other conditions.

Some examples are:

- methylprednisolone/MEDROL
- prednisone/DELTASONE
- prednisolone/PEDIAPRED, PRELONE
- cortisone acetate/CORTEF

Interaction

Food: Take with food or milk to decrease stomach upset.

NARCOTIC ANALGESICS

Narcotic analgesics are available only with a prescription. They provide relief for moderate to severe pain. Codeine can also be used to suppress cough. Some of these medications can be found in combination with non-narcotic drugs such as acetaminophen, aspirin, or cough syrups. Use caution when taking these medications: take them only as directed by a doctor or pharmacist because they may be habit forming and can cause serious side effects when used improperly.

Some examples are:

- codeine combined with acetaminophen/
TYLENOL #2,#3,& #4
- morphine/ROXANOL, MS CONTIN
- oxycodone combined with acetaminophen/
PERCOCET, ROXICET
- meperidine/DEMEROL
- hydrocodone with acetaminophen/
VICODIN, LORCET

Interaction

Alcohol: Avoid alcohol because it increases the sedative effects of the medications. Use caution when motor skills are required, including operating machinery and driving.

ASTHMA

BRONCHODILATORS

Bronchodilators are used to treat the symptoms of bronchial asthma, chronic bronchitis and emphysema. These medicines open air passages to the lungs to relieve wheezing, shortness of breath and troubled breathing.

Some examples are:

- theophylline / SLO-BID, THEO-DUR,
THEO-DUR 24, UNIPHYL,
- albuterol / VENTOLIN, PROVENTIL,
COMBIVENT
- epinephrine/PRIMATENE MIST

Interactions

Food: The effect of food on theophylline medications can vary widely. High-fat meals

may increase the amount of theophylline in the body, while high-carbohydrate meals may decrease it. It is important to check with your pharmacist about which form you are taking because food can have different effects depending on the dose form (e.g., regular release, sustained release or sprinkles) For example, food has little effect on Theo-Dur and Slo-Bid, but food increases the absorption of Theo-24 and Uniphyll which can result in side effects of nausea, vomiting, headache and irritability. Food can also decrease absorption of products like Theo-Dur Sprinkles for children.

Caffeine: Avoid eating or drinking large amounts of foods and beverages that contain caffeine (e.g., chocolate, colas, coffee, tea) because both oral bronchodilators and caffeine stimulate the central nervous system.

Alcohol: Avoid alcohol if you're taking theophylline medications because it can increase the risk of side effects such as nausea, vomiting, headache and irritability.

CARDIOVASCULAR DISORDERS

There are numerous medications used to treat cardiovascular disorders such as high blood pressure, angina, irregular heart beat, and high cholesterol. These drugs are often used in combination to enhance their effectiveness. Some classes of drugs can treat several conditions. For example, beta blockers can be used to treat high blood pressure, angina, and irregular heart beats. Check with your doctor or pharmacist if you have questions on any of your medications. Some of the major cardiovascular drug classes are:

DIURETICS

Sometimes called “water pills,” diuretics help eliminate water, sodium, and chloride from the body. There are different types of diuretics.

Some examples are:

furosemide/LASIX
triamterene/hydrochlorothiazide/
DYAZIDE, MAXZIDE
hydrochlorothiazide/HYDRODIURIL
triamterene/DYRENIUM
bumetamide/BUMEX
metolazone/ZAROXOLYN

Interaction

Food: Diuretics vary in their interactions with food and specific nutrients. Some diuretics cause loss of potassium, calcium, and magnesium. Triamterene, on the other hand, is known as a “potassium-sparing” diuretic. It blocks the kidneys’ excretion of potassium, which can cause hyperkalemia (increased potassium). Excess potassium may result in irregular heartbeat and heart palpitations. When taking triamterene, avoid eating large amounts of potassium-rich foods such as bananas, oranges and green leafy vegetables, or salt substitutes that contain potassium.

BETA BLOCKERS

Beta blockers decrease the nerve impulses to the heart and blood vessels. This decreases the heart rate and the work load of the heart.

Some examples are:

atenolol/TENORMIN
metoprolol/LOPRESSOR
propranolol/INDERAL
nadolol/CORGARD

Interaction

Alcohol: Avoid drinking alcohol with propranolol/INDERAL because the combination lowers blood pressure too much.

NITRATES

Nitrates relax blood vessels and lower the demand for oxygen by the heart.

Some examples are:

isosorbide dinitrate/ISORDIL,
SORBITRATE
nitroglycerin/NITRO, NITRO-DUR,
TRANSDERM-NITRO

Interaction

Alcohol: Avoid alcohol because it may add to the blood vessel-relaxing effect of nitrates and result in dangerously low blood pressure.

ANGIOTENSIN CONVERTING ENZYME (ACE) INHIBITORS

ACE inhibitors relax blood vessels by preventing angiotensin II, a vasoconstrictor, from being formed.

Some examples are:

- captopril/CAPOTEN
- enalapril/VASOTEC
- lisinopril/PRINIVIL, ZESTRIL
- quinapril/ACCUPRIL
- moexipril/UNIVASC

Interactions

Food: Food can decrease the absorption of captopril and moexipril. So take captopril and moexipril one hour before or two hours after meals. ACE inhibitors may increase the amount of potassium in your body. Too much potassium can be harmful. Make sure to tell your doctor if you are taking potassium supplements or diuretics (water pills) that may increase the amount of potassium in your body. Avoid eating large amounts of foods high in potassium such as bananas, green-leafy vegetables, and oranges.

HMG-CoA REDUCTASE INHIBITORS

Otherwise known as “statins,” these medications are used to lower cholesterol. They work to reduce the rate of production of LDL (bad cholesterol). Some of these drugs also lower triglycerides. Recent studies have shown that pravastatin can reduce the risk of heart attack, stroke, or miniature stroke in certain patient populations.

Some examples are:

- atorvastatin/LIPITOR
- cerivastatin/BAYCOL
- fluvastatin/LESCOL
- lovastatin/MEVACOR
- pravastatin/PRAVACHOL
- simvastatin/ZOCOR

Interaction

Alcohol: Avoid drinking large amounts of alcohol because it may increase the risk of liver damage.

Food: Lovastatin (Mevacor) should be taken with the evening meal to enhance absorption.

ANTICOAGULANTS

Anticoagulants help to prevent the formation of blood clots.

An example is:

warfarin/COUMADIN

Interactions

Food: Vitamin K produces blood-clotting substances and may reduce the effectiveness of anticoagulants. So limit the amount of foods high in vitamin K (such as broccoli, spinach, kale, turnip greens, cauliflower, and brussel sprouts).

High doses of vitamin E (400 IU or more) may prolong clotting time and increase the risk of bleeding. Talk to your doctor before taking vitamin E supplements.

INFECTIONS

ANTIBIOTICS AND ANTIFUNGALS

Many different types of drugs are used to treat infections caused by bacteria and fungi. Some general advice to follow when taking any such product is:

- Tell your doctor about any skin rashes you may have had with antibiotics or that you get while taking this medication. A rash can be a symptom of an allergic reaction, and allergic reactions can be very serious.
- Tell your doctor if you experience diarrhea.
- If you are using birth control, consult with your health care provider because some methods may not work when taken with antibiotics.
- Be sure to finish all your medication even if you are feeling better.
- Take with plenty of water.

ANTIBACTERIALS

PENICILLIN

Some examples are:

penicillin V / VEETIDS

amoxicillin / TRIMOX, AMOXIL

ampicillin / PRINCIPEN, OMNIPEN

Interaction

Food: Take on an empty stomach, but if it upsets your stomach, take it with food.

QUINOLONES

Some examples are:

ciprofloxacin / CIPRO

levofloxacin / LEVAQUIN

ofloxacin / FLOXIN

trovafloxacin / TROVAN

Interactions

Food: Take on an empty stomach one hour before or two hours after meals. If your stomach gets upset, take it with food. However, avoid calcium-containing products like milk, yogurt, vitamins or minerals containing iron, and antacids because they significantly decrease drug concentration.

Caffeine: Taking these medications with caffeine-containing products (e.g., coffee, colas, tea, and chocolate) may increase caffeine levels, leading to excitability and nervousness.

CEPHALOSPORINS

Some example are:

cefactor / CECLOR, CECLOR CD

cefadroxil / DURICEF

cefixime / SUPRAX

cefprozil / CEFZIL

cephalexin / KEFLEX, KEFTAB

Interaction

Food: Take on an empty stomach one hour before or two hours after meals. If your stomach gets upset, take with food.

MACROLIDES

Some examples are:

azithromycin / ZITHROMAX

clarithromycin / BIAXIN

erythromycin / E-MYCIN, ERY-TAB, ERYC

erythromycin + sulfisoxazole / PEDIAZOLE

Interaction

Food: Take on an empty stomach one hour before or two hours after meals. If your stomach gets upset, take with food.

SULFONAMIDES

An example is:

sulfamethoxazole + trimethoprim /
BACTRIM, SEPTA

Interaction

Food: Take on an empty stomach one hour before or two hours after meals. If your stomach gets upset, take with food.

TETRACYCLINES

Some examples are:

tetracycline / ACHROMYCIN, SUMYCIN

doxycycline / VIBRAMYCIN

minocycline / MINOCIN

Interaction

Food: Take on an empty stomach one hour before or two hours after meals. If your stomach gets upset, take with food. However, it is important to avoid taking tetracycline / ACHROMYCIN, SUMYCIN with dairy products, antacids and vitamins containing iron because these can interfere with the medication's effectiveness.

NITROIMIDAZOLE

An example is:

metronidazole / FLAGYL

Interaction

Alcohol: Avoid drinking alcohol or using medications that contain alcohol or eating foods prepared with alcohol while you are taking metronidazole and for at least three days after

you finish the medication. Alcohol may cause nausea, abdominal cramps, vomiting, headaches, and flushing.

ANTIFUNGALS

Some examples are:

fluconazole / DIFLUCAN
griseofulvin / GRIFULVIN
ketoconazole / NIZORAL
itraconazole / SPORANOX

Interaction

Food: It is important to avoid taking these medications with dairy products (milk, cheeses, yogurt, ice cream), or antacids.

Alcohol: Avoid drinking alcohol, using medications that contain alcohol, or eating foods prepared with alcohol while you are taking ketoconazole/NIZORAL and for at least three days after you finish the medication. Alcohol may cause nausea, abdominal cramps, vomiting, headaches and flushing.

MOOD DISORDERS

Depression, Emotional, and Anxiety Disorders

Depression, panic disorder and anxiety are a few examples of mood disorders -- complex medical conditions with varying degrees of severity. When using medications to treat mood disorders it is important to follow your doctor's instructions. Remember to take your dose as directed even if you are feeling better, and do not stop unless you consult your doctor. In some cases it may take several weeks to see an improvement in symptoms.

MONOAMINE OXIDASE (MAO) INHIBITORS

Some examples are:

phenelzine/NARDIL
tranylcypromine/PARNATE

Interactions

MAO Inhibitors have many dietary restrictions, and people taking them need to follow the

dietary guidelines and physician's instructions very carefully. A rapid, potentially fatal increase in blood pressure can occur if foods or alcoholic beverages containing tyramine are consumed while taking MAO Inhibitors.

Alcohol: Do not drink beer, red wine, other alcoholic beverages, non-alcoholic and reduced alcohol-beer and red-wine products.

Food: Foods high in tyramine that should be avoided include:

- American processed, cheddar, blue, brie, mozzarella and Parmesan cheese; yogurt, sour cream.
- Beef or chicken liver; cured meats such as sausage and salami; game meat; caviar; dried fish.
- Avocados, bananas, yeast extracts, raisins, sauerkraut, soy sauce, miso soup.
- Broad (fava) beans, ginseng, caffeine-containing products (colas, chocolate, coffee and tea).

ANTI-ANXIETY DRUGS

Some examples are:

lorazepam/ATIVAN
diazepam/VALIUM
alprazolam/XANAX

Interactions

Alcohol: May impair mental and motor performance (e.g., driving, operating machinery).

Caffeine: May cause excitability, nervousness, and hyperactivity and lessen the anti-anxiety effects of the drugs.

ANTIDEPRESSANT DRUGS

Some examples are:

paroxetine/PAXIL
sertraline/ZOLOFT
fluoxetine/PROZAC

Interactions

Alcohol: Although alcohol may not significantly interact with these drugs to affect mental or motor skills, people who are depressed should not drink alcohol.

Food: These medications can be taken with or without food.

STOMACH CONDITIONS

Conditions like acid reflux, heartburn, acid indigestion, sour stomach, and gas are very common ailments. The goal of treatment is to relieve pain, promote healing and prevent the irritation from returning. This is achieved by either reducing the acid the body creates or protecting the stomach from the acid. Lifestyle and dietary habits can play a large role in the symptoms of these conditions. For example, smoking cigarettes and consuming products that contain caffeine may make symptoms return.

HISTAMINE BLOCKERS

Some examples are:

cimetidine / TAGAMET or TAGAMET HB

famotidine / PEPCID or PEPCID AC

ranitidine / ZANTAC or ZANTAC 75

nizatadine / AXID OR AXID AR

Interactions

Alcohol: Avoid alcohol while taking these products. Alcohol may irritate the stomach and make it more difficult for the stomach to heal.

Food: Can be taken with or without regard to meals.

Caffeine: Caffeine products (e.g., cola, chocolate, tea and coffee) may irritate the stomach.

DRUG-TO-DRUG INTERACTIONS

Not only can drugs interact with food and alcohol, they can also interact with each other. Some drugs are given together on purpose for an added effect, like codeine and acetaminophen for pain relief. But other drug-to-drug interactions may be unintended and harmful. Prescription drugs can interact with each other or with over-the-counter (OTC) drugs, such as acetaminophen, aspirin, and cold medicine. Likewise, OTC drugs can interact with each other.

Sometimes the effect of one drug may be increased or decreased. For example, tricyclic antidepressants such as amitriptyline (ELAVIL), or nortriptyline (PAMELOR) can decrease the ability of clonidine (CATAPRES) to lower blood pressure. In other cases, the effects of a drug can increase the risk of serious side effects. For example, some antifungal medications such as itraconazole (SPORANOX) and ketoconazole (NIZORAL) can interfere with the way some cholesterol-lowering medications are broken down by the body. This can increase the risk of a serious side effect.

Doctors can often prescribe other medications to reduce the risk of drug-drug interactions. For example, two cholesterol-lowering drugs—pravastatin (PRAVACHOL) and fluvastatin (LESCOL), are less likely to interact with antifungal medications. Be sure to tell your doctor about all medications—prescription and OTC—that you are taking.

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